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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,995	09/30/2003	Barrett Morris Kreiner	BS030264 (03-BS021)	5237
7590 Scott P. Zimmerman P.O. Box 3822 Cary, NC 27519			EXAMINER ZHAO, DAQUAN	
			ART UNIT 2621	PAPER NUMBER
			MAIL DATE 06/15/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/674,995	Applicant(s) KREINER ET AL.	
	Examiner Daquan Zhao	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/30/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/30/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/13/2007; 1/26/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: page 2, paragraphs [0002] and [0003] fail to disclose the patent application number for the co-pending applications. The title of the invention is not descriptive. Appropriate correction is required.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-6, 9-20 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 3, 5, 6, 7, 8, 9, 11, 12, 14, 15, 18 of copending Application No. 10/674,840 (it will be referred to as

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#840 from now on). Although the conflicting claims are not identical, they are not patentably distinct from each other because

Claim 1 of the instant application is drawn to storing in memory at least one of audio data and video data of an event, the video data comprising a series of picture frames (e.g. **claim 1 of #840** teaches a memory for storing at least one of i) video data of an event and ii) audio data of an event); storing at least one of the audio data and the video data in a loop buffer (e.g. **claim 6, which depends on claim 1, of #840** disclose a loop buffer storing audio and video data); and transferring the contents of the loop buffer to the memory to provide at least one of time-delayed audio data and time-delayed video data, the time-delayed audio data and the time-delayed video data preceding the event (e.g. **claims 5 and 7, which depend on claim 1, of #840** teach transferring the content of the loop buffer to memory, and the data in the loop buffer provides time-delayed).

Claim 18 of # 840 also encompasses all the limitation of claim 1 of the instant application as discussed above.

Claim 11 of the instant application is rejected for the same reasons as discussed in claim 1 of the instant application above with further limitation: i) multiple regions of interest within a signal picture frame and ii) multiple regions of disinterest within the single picture frame (**claim 1 and 18 of #840** teach i) multiple regions of interest within a signal picture frame and ii) multiple regions of disinterest within the single picture frame).

Claim 18 of the instant application is rejected for the same reasons as discussed in claim 11 of the instant application above with further limitation: transferred at a bit rate associated with the region of interest (**claim 1 and 18** of #840 disclose transferred at a bit rate associated with the region of interest).

Claims 7, 8, 9, 11, 14 15 and 12 of #840 encompass the limitations of **claims 2, 3, 4, 5, 6, 9 and 10 of the instant application, respectively.**

Claims 9, 1, 2, 12, 14, 15, 3 and 1 of #840 encompass the limitations of claims **12, 13, 14, 15, 16, 17, 19 and 20 of the instant application, respectively.**

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

4. Claim 7 of the instant application is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 3, 5, 6, 7,8,9,11,12,14,15, 18 of copending Application No. 10/674,840 (it will be refer to as #840 from now no) and further in view of Fiore et al (US 2002/0,191,952 A1). Although the conflicting claims are not identical, they are not patentably distinct from each other

See the teach of #840 above.

Regarding claim 7, #840 fails to teach interfacing with a switch to transfer the contents of the loop buffer to the memory. Fiore et al teach interfacing with a switch to transfer the contents of the loop buffer to the memory (e.g. paragraph [0047], swapping between RAM 19 and File system 17 from the circular buffer, "interfacing" corresponds

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to a wire). It would have been obvious for one ordinary skill in the art at the time the invention was made to incorporate the teaching of claim 7 into the teaching of #840 to increase the capacity of the storage device.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

5. Claim 8 of the instant application is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 3, 5, 6, 7,8,9,11,12,14,15, 18 of copending Application No. 10/674,840 (it will be refer to as #840 from now no) and further in view of Tak (US 2003/0,109,972 A1). Although the conflicting claims are not identical, they are not patentably distinct from each other

See the teach of #840 above.

Regarding claim 8, #840 fails to teach interfacing with a vehicle controller. Tak teaches interfacing with a vehicle controller (e.g. paragraph [0064]). It would have been obvious for one ordinary skill in the art at the time the invention was made to incorporate the teaching of Tak into the teaching of #840 to monitor the speed of a vehicle to ensure the safety of the driver.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 2, 6, 7 and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Fiore et al (US 2002/0,191,952 A1).

In regards to claim 1, Fiore et al teach a method, comprising:

- storing in memory at least one of audio data and video data of an event, the video data comprising a series of picture frames (e.g. paragraph [0046]-[0048], analyzer 18 triggers an event);
- storing at least one of the audio data and the video data in a loop buffer (e.g. paragraph [0046]-[0048], data frames are stored in the circular storage buffer 15); and
- transferring the contents of the loop buffer to the memory to provide at least one of time-delayed audio data and time-delayed video data, the time-delayed audio data and the time-delayed video data preceding the event (e.g. paragraph [0046]-[0048], the frame data is buffered from the head of the circular to the tail of the circular buffer, which corresponds to a time delay. The frames are

transferred to the file system 17 from the circular buffer 15 or transfer to RAM 19, see paragraph [0067]).

Regarding claim 2, Fiore et al teach applying a set of rules to transfer the contents of the loop buffer to memory (e.g. paragraph [0067] disclose the data in the circular buffer is transferred to the RAM with a fixed format described by the memory mapped file 110, wherein the format, which corresponds to a set of rules, is decrypted in paragraph [0064]-[0065]).

Regarding claim 6, Fiore et al teach communicating the contents of the loop buffer via a communications network (e.g. paragraph[0069]).

Regarding claim 7, Fiore et al teach interfacing with a switch to transfer the contents of the loop buffer to the memory (e.g. paragraph [0047], swapping between RAM 19 and File system 17 from the circular buffer, "interfacing" corresponds to a wire).

Regarding claim 10, Fiore et al teach interfacing with means for sensing the event (e.g. paragraph [0049], event interface 21).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. Claims 11, 13, 14, 15, 16, 18, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fiore et al (US 2002/0,191,952 A1), in view of Krishnamurthy et al (US 6,496,607 B1).

In regards to claim 11, In regards to claim 1, Fiore et al teach a method, comprising:

- storing in memory at least one of audio data and video data of an event, the video data comprising a series of picture frames (e.g. paragraph [0046]-[0048], analyzer 18 triggers an event);
- storing at least one of the audio data and the video data in a loop buffer (e.g. paragraph [0046]-[0048], data frames are stored in the circular storage buffer 15); and
- transferring the contents of the loop buffer to the memory to provide at least one of time-delayed audio data and time-delayed video data, the time-delayed audio data and the time-delayed video data preceding the event (e.g. paragraph [0046]-[0048], the frame data is buffered from the head of the circular to the tail of the circular buffer, which corresponds to a time delay. The frames are transferred to the file system 17 from the circular buffer 15 or transfer to RAM 19, see paragraph [0067])).).

Fiore et al fail to teach specifying at least one of i) multiple regions of interest within a single picture frame and ii) multiple regions of disinterest within the single picture frame; Krishnamurthy et al teach specifying at least one of i) multiple regions of

interest within a single picture frame and ii) multiple regions of disinterest within the single picture frame (e.g. column 6, line 62-column 7, line 10). It would have been obvious for one ordinary skill in the art at the time the invention was made to incorporate the teaching of Krishnamurthy et al into the teaching of Fiore et al to increase the quality of or resolution for the region of interest (Krishnamurthy et al, column 7, lines 5-10).

Claim 18 is rejected for the same reasons as discussed in claim 11 above and further limited with a bit rate associated with the region of interest. Column 6, lines 45-60 of Krishnamurthy et al teach a rate control module 130 to control the bit rate and code the different regions of the frame with different bit rate according to their importance or interest level, which corresponds to a bit rate associated with the region of interest.

Regarding claim 19, Fiore et al teach applying a set of rules to transfer the contents of the loop buffer to memory (e.g. paragraph [0067] disclose the data in the circular buffer is transferred to the RAM with a fixed format described by the memory mapped file 110, wherein the format, which corresponds to a set of rules, is decrypted in paragraph [0064]-[0065]).

Regarding claim 16, Fiore et al teach communicating the contents of the loop buffer via a communications network (e.g. paragraph[0069]).

Regarding claim 13, Krishnamurthy et al teach applying a set of rules when specifying the multiple regions of interest and the multiple regions of disinterest (e.g. column 6, line 45- column 7, line 10, different coding standards for various areas of the frame according to the difference in importance corresponds to "a set of rules").

Regarding claim 14, Fiore et al teach applying a set of rules to transfer the contents of the loop buffer to memory (e.g. paragraph [0067] disclose the data in the circular buffer is transferred to the RAM with a fixed format described by the memory mapped file 110, wherein the format, which corresponds to a set of rules, is decrypted in paragraph [0064]-[0065]).

Regarding claim 20, Krishnamurthy et al teach applying a set of rules to dynamically vary the bit rate of the transferred contents of the loop buffer (e.g. column 6, line 45- column 7, line 10, different coding standards for various areas of the frame according to the difference in importance and the bit rate of the data stream is vary due to this reason).

Regarding claim 15, Fiore et al teach interfacing with means for sensing the event (e.g. paragraph [0049], event interface 21).

8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fiore et al (US 2002/0,191,952 A1) as applied to claim 1 above.

See the teaching of Fiore et al above.

Regarding claim 3, Fiore et al teaching transferring the content of the loop buffer to the file system 17 (e.g. paragraph [0048]). However, Fiore et al fail to specify the file system 17 is a mass-storage device. The examiner takes official notice for the mass-storage device. It would have been obvious for one ordinary skill in the art at the time the invention was made to have utilized a mass-storage device as a file system to increase the storage capacity.

9. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fiore et al (US 2002/0,191,952 A1) as applied to claim 1 above.

See the teaching of Fiore et al above.

Regarding claim 4, Fiore et al teaching transferring the content of the loop buffer to the file system 17 (e.g. paragraph [0048]). However, Fiore et al fail to specify the file system 17 is an optical storage device. The examiner takes official notice for the optical storage device. It would have been obvious for one ordinary skill in the art at the time the invention was made to have utilized a mass-storage device as a file system to increase the storage capacity.

10. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fiore et al (US 2002/0,191,952 A1) as applied to claim 1 above.

See the teaching of Fiore et al above.

Regarding claim 5, Fiore et al teaching transferring the content of the loop buffer to the file system 17 (e.g. paragraph [0048]). However, Fiore et al fail to specify the file system 17 is a flash memory storage device. The examiner takes official notice for the flash memory storage device. It would have been obvious for one ordinary skill in the art at the time the invention was made to have utilized a mass-storage device as a file system to increase the storage capacity.

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11. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fiore et al (US 2002/0,191,952 A1) as applied to claim 1 above, and further in view of Tak (US 2003/0,109,972 A1).

See the teaching of Fiore et al above.

Regarding claim 8, Fiore et al fail to teach interfacing with a vehicle controller. Tak teaches interfacing with a vehicle controller (e.g. paragraph [0064]). It would have been obvious for one ordinary skill in the art at the time the invention was made to incorporate the teaching of Tak into the teaching of Fiore et al to monitor the speed of a vehicle to ensure the safety of the driver.

12. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fiore et al (US 2002/0,191,952 A1) and Krishnamurthy et al (US 6,496,607 B1) as applied to claims 11 and 18 above.

See the teaching of Fiore et al above.

Regarding claim 12, Fiore et al teaching transferring the content of the loop buffer to the file system 17 (e.g. paragraph [0048]). However, Fiore et al and Krishnamurthy et al fail to specify the file system 17 is an optical storage device. The examiner takes official notice for the optical storage device. It would have been obvious for one ordinary skill in the art at the time the invention was made to have utilized a mass-storage device as a file system to increase the storage capacity.

13. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fiore et al (US 2002/0,191,952 A1) as applied to claim 1 above, and further in view of Maeda et al (US 6,763,071 B1).

See the teaching of Fiore et al above.

Regarding claim 9, Fiore et al fail to teach tagging the video data with metadata, the metadata providing a description of the contents. Maeda et al teach tagging the video data with metadata, the metadata providing a description of the contents (e.g. column 12, lines 53-67). It would have been obvious for one ordinary skill in the art at the time the invention was made to incorporate the teaching of Maeda et al into the teaching of Fiore et al to tag the video data of the loop buffer for prompt identification of the video.

14. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fiore et al (US 2002/0,191,952 A1) and Krishnamurthy et al (US 6,496,607 B1) as applied to claims 11 and 18 above, and further in view of Maeda et al (US 6,763,071 B1).

See the teaching of Fiore et al above.

Regarding claim 17, Fiore et al and Krishnamurthy et al fail to teach tagging the video data with metadata, the metadata providing a description of the contents. Maeda et al teach tagging the video data with metadata, the metadata providing a description of the contents (e.g. column 12, lines 53-67). It would have been obvious for one ordinary skill in the art at the time the invention was made to incorporate the teaching of

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Meada et al into the teaching of Fiore et al and Krishnamurthy et al to tag the video data of the loop buffer for prompt identification of the video.

Conclusion

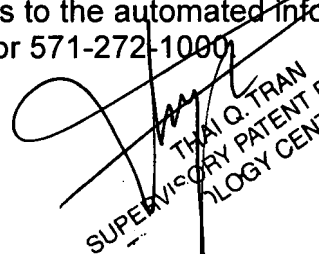
15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tam (US 2004/0,052,501 A1); Freeman et al (US 7,088,387 B1); Kirsten (US 5,724,475);

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daquan Zhao whose telephone number is (571) 270-1119. The examiner can normally be reached on M-Fri. 7:30 -5, alt Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tran Thai Q, can be reached on (571)272-7382. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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